## PATENT COOPERATION TREATY

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| From the INTERNATIONAL PRELIMINARY EXAMINI   | NG AUTHORITY         | •                                | Cirnin   |
|--|----------------------|----------------------------------|--|
| To:<br>MARK L. YASKANIN<br>SHERIDAN ROSS P.C.<br>1560 BROADWAY,  |                      |                                  | PCT SHERIDAN, ROSS                                     |
| SUITE 1200<br>DENVER, CO 80202-5141  |                      | •                                | WRITTEN OPINION  |
| Date:  |                      |                                  | (PCT Rule 66)  |
| Initial:   |                      | Date of Mailing (day/month/year) | 14 AUG 2003  |
| Applicant's or agent's filefretener sturn to   | lanica               | · ·                              | within 2 months/days from<br>the above date of mailing |
|  | national filing date |                                  | Priority date (day/month/year)                         |
| PCT/US02/31201 30 Se   | ptember 2002 (30.    | 09.2002)                         | 28 September 2001 (28.09.2001)                         |
| International Patent Classification (IPC) or both  | national classifica  | tion and IPC                     |  |
| IPC(7): A61B 17/70 and US Cl.: 606/61  |                      |                                  |  |
| Applicant  |                      |                                  |  |
| RITLAND, STEPHEN   |                      |                                  |  |
| This written opinion is the <u>first</u> (first     This opinion contains indications related to the first opinion contains indications.)  | •                    |                                  | liminary Examining Authority.                          |
| . 🕅  | •                    |                                  |  |
| I Basis of the opinion   |                      | r                                | •  |
| II Priority  |                      |                                  |  |
| III Non-establishment of opi   | nion with regard to  | o novelty, inventive s           | tep and industrial applicability                       |
| IV Lack of unity of invention  | n                    |                                  |  |
| V Reasoned statement under citations and explanations  |                      |                                  | y, inventive step or industrial applicability;         |
| VI Certain documents cited   |                      | •                                | •  |
| VII Certain defects in the inte  | ernational applicati | on                               |  |
| VIII Certain observations on the   | he international ap  | plication                        |  |
| 3. The applicant is hereby invited to re   | eply to this opinior | n.                               | ·  |
| When? See the time limit inc<br>this Authority to gran   |                      |                                  | re the expiration of that time limit, request          |
| How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.   |                      |                                  |  |
| Also For an additional opportunity to submit amendments, see Rule 66.4.  For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.  For an informal communication with the examiner, see Rule 66.6 |                      |                                  |  |
| - ·  | •                    | nination report will be          | established on the basis of this opinion.              |
| 4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 28 January 2004 (28.01.2004)  |                      |                                  |  |
| Name and mailing address of the IPEA/US  |                      | Authorized office                | $\sqrt{}$  |
| Mail Stop PCT, Attn: IPEA/US Commissioner for Patents  |                      | David O. Reip                    |  |
| P.O. Box 1450<br>Alexandria, Virginia 22313-1450   |                      | Telephone No. 70                 | 03-308-0858  |
| Facsimile No. (703)305-3230  |                      |                                  |  |

Form PCT/IPEA/408 (cover sheet)(July 1998)

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| nternational | appli | cation | No. |
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PCT/US02/31201

| I. | Basi     | is of the opinion   |
|----|----------|---|
| i. | With     | regard to the elements of the international application:*   |
| 1. |          | the international application as originally filed the description: pages 1-37, as originally filed pages NONE, filed with the demand pages NONE, filed with the letter of  the claims: pages 38-49, as originally filed pages NONE, filed with any statement) under Article 19 pages NONE, filed with the demand  |
|    |          | the drawings: pages 1-17 , as originally filed pages NONE , filed with the demand pages NONE , filed with the letter of  the sequence listing part of the description:  |
| 2. | With     | pages NONE, as originally filed pages NONE, filed with the demand pages NONE, filed with the letter of  regard to the language, all the elements marked above were available or furnished to this Authority in the  |
|    | langı    | regard to the language, an the elements marked above were available or ithinshed to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  e elements were available or furnished to this Authority in the following language which is:  |
|    |          | the language of a translation furnished for the purposes of international search (under Rule23.1(b)).  the language of publication of the international application (under Rule 48.3(b)).  the language of the translation furnished for the purposes of international preliminary examination(under Rules 55.2 and/or 55.3).   |
|    |          | regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written on was drawn on the basis of the sequence listing:  |
|    |          | contained in the international application in printed form.  filed together with the international application in computer readable form.  furnished subsequently to this Authority in written form.  furnished subsequently to this Authority in computer readable form.  The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished. |
| 4. |          | The amendments have resulted in the cancellation of:  |
|    | <u>`</u> | the description, pages NONE the claims, Nos. NONE the drawings, sheets/fig NONE   |
| 5. |          | This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).  |
|    | •        | cement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in ion as "originally filed."   |

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## WRITTEN OPINION

International application No. PCT/US02/31201

| V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  |   |   |                                    |
|--|---|---|------------------------------------|
| 1. STATEMENT   |   |   |                                    |
| Novelty (N)  | Claims  | Please See Continuation Sheet   | YES                                |
|  | Claims  | Please See Continuation Sheet   | NO                                 |
| Inventive Step (IS)  | Claims  | Please See Continuation Sheet   | YES                                |
|  |   | Please See Continuation Sheet   | NO                                 |
| Industrial Applicability (IA)  | Claims  | Please See Continuation Sheet   | YES                                |
| industrial Applications (171)  |   | Please See Continuation Sheet   | NO                                 |
|  |   |   |                                    |
| 2. CITATIONS AND EXPLANATIONS  |   |   |                                    |
| Claims 1, 2, 4-9, and 12 lack novelty under PCT A 1-4 and 10-12 of Taylor et al show a surgical implaincluding: an attachment device 5 with a second entension link 7; a "rod" 3 having a preformed socket Claims 13, 15, 16, and 18 lack novelty under PCT A  | nt assembly ha<br>d 57 having a I<br>that is partiall | ving all the limitations as recited in claims 1, 2,<br>nollow core bordered by curved walls and an "er<br>y spherical in shape; and a tension link nut 8. | 4-9 and 12,<br>arry channel" 12; a |
| of Allard show a tool for inserting a pedicle screw he receptacle 54 for mating with the enlarged area of the  | aving all the li                                      | mitations as recited in claims 13, 15, 16, and 18   |                                    |
| Claims 30, 31, 35, 37, 40-42, and 44 lack novelty under PCT Article 33(2) as being anticipated by Korotko et al (U.S. Pat. No. 5,312,405). Figs. 1-2 of Korotko et al show a bone stabilization device having all the limitations as recited in claims 30-31, 35, 37, 40-42, and 44, including: a first rod member 40; a first interconnection mechanism 10 for attaching the first rod member to the first attachment device 44; a second rod member 40 including a compression zone (the clamping portion clamped by screw 42); and a second interconnection mechanism 10.   |   |   |                                    |
| Claims 3, 10, 11, 14, 17, 19-29, 32-34, 36, 38, 39, 43, and 45-84 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest devices, tools, and methods having all the limitations as recited in claims 3, 10, 11, 14, 17, 19-29, 32-34, 36, 38, 39, 43, and 45-84. For example, with respect to claim 3, the prior art fails to disclose or suggest a surgical implant assembly having all the limitations as recited in claim 3, including wherein the second end of the attachment device comprises at least one expansion slot operatively associated with the hollow core. |   |   |                                    |
| Claims 1-84 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.   |   |   |                                    |
|  |   | ,   |                                    |
| NEW CITATIONS  |   |   |                                    |
| NONE   |   |   |                                    |
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International application No. PCT/US02/31201

| Supp | lemental | Box |
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(To be used when the space in any of the preceding boxes is not sufficient)

## TIME LIMIT:

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.

## V.1. Reasoned Statements:

The opinion as to Novelty was positive (Yes) with respect to claims 3, 10, 11, 14, 17, 19-29, 32-34, 36, 38, 39, 43, 45-84
The opinion as to Novelty was negative (No) with respect to claims 1, 2, 4-9, 12, 13, 15, 16, 18, 30, 31, 35, 37, 40-42, 44
The opinion as to Inventive Step was positive (Yes) with respect to claims 3, 10, 11, 14, 17, 19-29, 32-34, 36, 38, 39, 43, 45-84
The opinion as to Inventive Step was negative(NO) with respect to claims 1, 2, 4-9, 12, 13, 15, 16, 18, 30, 31, 35, 37, 40-42, 44
The opinion as to Industrial Applicability was positive (YES) with respect to claims 1-84
The opinion as to Industrial Applicability was negative(NO) with respect to claims NONE

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